REMARKS

Claims 1-31 are pending in the present application. Claims 1-10, 12-20, and 22-31 have been rejected, and claims 11 and 21 are objected to as being dependent upon a rejected base claim. Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the office action of September 25, 2006, the following actions were taken:

(1) Claims 1-10 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,358,306 to Handa et al. (hereinafter "Handa") in view of U.S. Patent No. 6,352,805 to Taylor et al. (hereinafter "Taylor") and U.S. Patent No. 4,929,590 to Maruta et al. (hereinafter "Maruta");

(2) Claims 13, 18-20, and 22-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,692,799 to Waller, Jr. (hereinafter "Waller, Jr.") in view of Taylor;

(3) Claims 14-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Waller, Jr. in view of Taylor as applied to claim 13 and further in view of Maruta; and

(4) Claims 11 and 21 were deemed to be directed to allowable subject matter, but objected to as depending on a rejected base claim.

It is respectfully submitted that the presently pending claims be reconsidered and allowed.

The Examiner has rejected claims 1-10, 12-20, and 22-31 as being obvious under 35 U.S.C. § 103(a) in view of a number of references. The Applicant respectfully submits that these claims are patentable over the cited reference for the reasons set forth below, and that the rejection should be withdrawn.

Before discussing the obviousness rejections herein, it is thought proper to briefly state what is required to sustain such a rejection. The issue under § 103 is whether the PTO has stated a case of *prima facie* obviousness. According to the MPEP § 2142, the Examiner has the burden and must establish a case of *prima facie* obviousness by showing the prior art reference, or references combined, teach the

claim limitations in the instant application. The Applicant respectfully asserts the Examiner has not satisfied the requirement for establishing a case of *prima facie* obviousness in any of the rejections.

The present invention is directed to the preparation of fused ink-jet images. The invention provides a media sheet (which can be used for this purpose) comprising a substrate, an ink receiving layer coated onto a surface of the substrate, wherein the ink receiving layer comprises hollow particulates, and wherein a UV protection layer is coated on the ink receiving layer which includes UV absorbing latex particulates. The present invention also provides a system for preparing fused ink-jet images comprising a media sheet as described above, an ink-jet ink that, when printed onto the sheet, passes through the protection layer and into the voids of the particulates of the ink receiving layer. Also included in the system is a fusion system for fusing the UV protection layer and the ink receiving layer after printing.

Handa in view of Taylor and Maruta

The Examiner has rejected claims 1-10 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Handa in view of Taylor and Maruta. Applicant submits that these references, both alone and in combination, fail to teach each and every element of the claimed invention.

Handa discloses an ink-jet recording sheet having an ink receiving layer on at least one side of a base material sheet. Handa teaches using a hydrophilic resin to form the ink receiving layer. In a lengthy list of other potential additives, the reference notes that hollow particles may be incorporated into the ink receiving layer. Handa does not teach a UV protection layer, or likewise a layer including UV absorbing latex particulates. Although Handa mentions "at least one" ink receiving layer, Handa does not teach or exemplify coating one ink receiving layer on top of another ink receiving layer. Handa does discuss the use of primer layers, anti-curling layers and lubricant layers optionally coated onto the base material sheets prior to the ink receiving layer. Rather, Handa teaches a variety of formulations for ink receiving layers.

Taylor, on the other hand, does teach a UV protective coating. However, it does not teach a UV protective coating for an ink receiving layer. Rather, Taylor teaches an imaging element onto which a latex overcoat comprising a

photopolymerizable component can be applied. To clarify – the image must be present on the substrate before the UV protective coating can be applied. By the very nature, therefore, the UV protective coating cannot be interpreted to be used as an overcoat to an ink receiving layer, as is presently claimed. Furthermore, Taylor teaches this overcoat is to provide waterfastness to an underlying image. Optionally, the polymerizable component can be UV absorptive. A UV protective coating, as taught by Taylor, is directed to providing a durable, watertight overcoat for an imaged element, such as a processed photographic element. Once in place on top of an image, the coating is designed to keep out moisture, and would therefore not function to receive ink and allow the ink to pass through to the underlying layer(s) of material.

Maruta, as discussed extensively in previous responses, discloses a thermosensitive recording material, comprising a support, an undercoat layer formed on the support which includes spherical hollow particles; and a thermosensitive coloring layer formed on the undercoat layer which includes a leuco dye and color developer. The material may further comprise a protective layer formed on the coloring layer. Maruta fails to teach an ink receiving layer coated onto a substrate, an ink receiving layer including hollow particulates, and a UV protective layer coated onto an ink receiving layer. Maruta does teach a heat insulating layer containing hollow particles. Further, images formed consistent with the Maruta reference are not printed images, in that the images are not the result of a media sheet receiving ink. Rather, the images of Maruta are formed applying heat to an already present thermosensitive dye. As such, there is no disclosure in Maruta of an ink receiving layer coated onto a substrate.

None of the cited references teach or suggest a UV protection layer applied as a coating to an ink receiving layer. Handa teaches an ink receiving layer. Although Handa teaches an ink receiving layer that may optionally include hollow particles, Handa does not teach coating the ink receiving layer. Further, as Handa does not teach coating the ink receiving layer, it clearly does not teach coating the ink receiving layer with a UV protection layer. Likewise, Maruta does not teach coating an ink receiving layer with a UV protection layer. Maruta does not teach an ink receiving layer, and therefore, inherently can not teach coating a non-existent layer with a protection layer. Further, Taylor teaches against such a configuration. The reference teaches coating an already-formed image with a UV protection layer. A

properly-functioning UV protection layer of Taylor, if used in the present application, would not permit passage of ink to the ink receiving layer, and would therefore thwart the purpose of the ink receiving layer. The term "ink receiving layer" must infer that this layer receives ink. Thus, the UV protection layer, by necessity of the claim language, must be formulated to allow ink to at least partially pass therethrough when applied. This being said, claims 1 and 25 have been amended to explicitly include such a limitation. None of the references teach this concept, i.e. a UV protection layer that allows ink to pass through to an ink receiving layer.

In light of this, Applicant submits that Handa in view of Taylor and Maruta do not present a *prima facie* case of obviousness for claims 1-10 and 12 under 35 U.S.C. § 103(a) for lack of teaching each and every element. Applicant therefore respectfully requests that this rejection be withdrawn.

Waller, Jr. in view of Taylor

The Examiner rejected claims 13, 18-20, and 22-31 under 35 U.S.C. § 103(a) as being unpatentable over Waller, Jr. in view of Taylor. This rejection is identical to the rejection asserted by the Examiner in the Office Action of March 31, 2006. Although the Applicant responded, the Examiner did not respond to the discussion specifically regarding the rejection over Waller, Jr. in view of Taylor. As such, said previous response is reiterated herein.

These claims provide a system and a method for preparing a fused ink-jet image, comprising the media sheet already discussed. The Examiner suggests that Waller, Jr. discloses such a system. Waller, Jr. discloses an imageable media comprising a substrate, a porous layer containing particles and granules disposed on one surface of the substrate, and an overlayer disposed on at least one side of the substrate which may be fused to the layer underneath it. However, the teaching of Waller, Jr. suffers deficiencies similar to those of the other cited references.

First, Waller, Jr. does not teach an ink receiving layer comprising hollow particulates. The Examiner has suggested that the porous layer of Waller, Jr. (element 15, Fig. 1) corresponds to this element of claims 13 and 25. However, the particles and granules in the porous layer as disclosed in Waller, Jr. are not the same type of particles as claimed. Second, the overlayer of Waller, Jr., like the protective overcoat in Taylor, comprises an impermeable lamina that must be applied after an image has

been printed on the underlying media. The system of the present invention, on the other hand, comprises a media sheet that already possesses a UV protection layer when an ink-jet image is printed thereon. Additionally, the fusing step of Waller, Jr. referred to by the Examiner does not correspond to the fusion system and step of claims 13 and 25, respectively. This step in Waller, Jr. is not a process to fuse the overlayer with the media. Rather, it is employed to fix the colorant in the porous layer before applying the overlayer.

It is noted that claim 13 already has a limitation similar to that which has been amended into claims 1 and 25. Specifically, claim 13 sets forth an ink-jet ink configured for printing onto the media sheet, wherein upon printing, the ink-jet ink substantially passes through the UV protection layer and is taken within voids of the hollow particulates (which is part of the ink receiving layer). Thus, for the same reasons set forth above, claims 13 and 25 are believed to be in allowable condition.

It is clear that neither Waller, Jr. nor Taylor teaches each and every element of claim 13 or 25, and they certainly do not do so when combined. As such, these references also fail to teach or suggest every element of claims 18-20, 22-24, and 26-31, each of which includes all of the limitations of claim 13 or 25. Applicant therefore requests that these rejections be withdrawn.

Waller, Jr. in view of Taylor and Maruta

The Examiner has rejected claims 14-17 under 35 U.S.C. § 103(a) as being unpatentable over Waller, Jr. in view of Taylor as applied to claim 13 and further in view of Maruta. As with the rejections based on Waller, Jr. and Taylor alone, the rejection further in combination with Maruta is identical to the rejection asserted by the Examiner in the Office Action of March 31, 2006. Although the Applicant responded, the Examiner did not respond to the discussion specifically regarding the rejection over Waller, Jr. in view of Taylor and Maruta. As such, said previous response is reiterated herein.

For the reasons discussed above, Applicant submits that none of these references, alone or in combination, teaches or suggests every element of claim 13. Particularly, these references fail to teach an ink receiving layer coated onto a substrate and a UV protection layer coated onto the ink receiving layer as set forth in claim 13. These references therefore also fail to teach every element of claims 14-17,

which provide further limitations on these elements. Therefore, Applicant requests that these rejections be withdrawn.

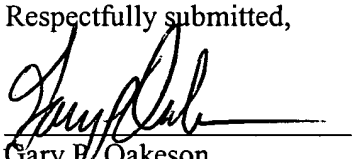
CONCLUSION

In view of the foregoing, Applicants believe that all of the pending claims present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone W. Bradley Haymond (Registration No. 35,186) at (541) 715-0159 so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 22nd day of December, 2006.

Respectfully submitted,



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